

Active Recombinant Human CYP2C18 Protein

Cat. No. CYP2C18-77H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP2C18 protein and CYP-reductase without tag were coexpressed in E. coli.
Species	Human
Source	E.coli
Description	<p>This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum but its specific substrate has not yet been determined. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. An additional gene, CYP2C17, was once thought to exist; however, CYP2C17 is now considered an artefact based on a chimera of CYP2C18 and CYP2C19. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.</p>
Bio-activity	<p>Cytochrome c Reductase Activity: 482 nmol/min/mg protein P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 50 mM potassium phosphate buffer (pH 7.4) containing 5 mM magnesium chloride and an NADPH generating system [5 mM glucose 6-phosphate, 1 mM NADP+, 1 U/ml glucose 6-phosphate dehydrogenase]) Activity: Diclofenac 4'-hydroxylase Linear with time up to: 6 min(Determined at 40 μM substrate, using a P450</p>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

concentration of 250 pmol/ml)
 Linear with P450 up to: 300 pmol/ml(Determined at 40 μ M substrate, using an incubation time of 5 min)
 Vmax: 0.52 min⁻¹
 Km: 54 μ M

Usage For laboratory (research) purposes only

Storage Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.

Concentration
 P450 Concentration: 9.9 nmol/ml
 Protein Concentration: 13.9 mg/ml
 Specific P450 Content: 712 pmol/mg protein

Storage Buffer 50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA

GENE INFORMATION

Gene Name [CYP2C18 cytochrome P450 family 2 subfamily C member 18 \[Homo sapiens \(human\) \]](#)

Official Symbol [CYP2C18](#)

Synonyms CYP2C18; cytochrome P450 family 2 subfamily C member 18; CPCI; CYP2C; CYP2C17; P450IIC17; P450-6B/29C; cytochrome P450 2C18; (S)-mephenytoin hydroxylase associated cytochrome P450; CYP1IC18; cytochrome P450, family 2, subfamily C, polypeptide 18; cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 17; cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 18; cytochrome P450-6B/29C; flavoprotein-linked monooxygenase; microsomal monooxygenase; unspecific monooxygenase

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Gene ID	1562
mRNA Refseq	NM_000772
Protein Refseq	NP_000763
MIM	601131
UniProt ID	P33260

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